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EXAMINER	
WONG, ALLEN C	
ART UNIT	PAPER NUMBER
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SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/762,736	LAINEMA ET AL.	
	Examiner	Art Unit	
	Allen Wong	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 19 December 2006.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 and 33-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 and 33-39 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/19/06 have been fully read and considered but they are not persuasive.

Regarding lines 1-4 on page 11 of applicant's arguments about double patenting rejection of claims 1 and 15, applicant decides to wait at a later time to submit a terminal disclaimer. For now, the double patenting rejection is maintained until submission of the terminal disclaimer.

Regarding lines 15-17 and 23-25 on page 11 of applicant's remarks about claims 1-2 and 5-14, applicant argues that there is no mention of "motion" in Bist. The examiner respectfully and strongly disagrees. In column 2, lines 17-21, Bist discloses the use of interblock coding, in that interblocks are blocks that are obtained from a difference between a current video frame and a reference video frame, and that interframe difference is motion estimated and compensated. Interframe encoding is extremely well known for encoding motion from differences between a reference image and the current image data, and this difference indicates the "motion" between two adjacent or successive moving images. Thus, clearly Bist teaches the concept of "motion" and estimation of motion elements.

Regarding lines 4-7 on page 12 of applicant's remarks, applicant asserts that there is insufficient basis of "motion". The examiner respectfully disagrees. In column 2, lines 17-21, Bist discloses the use of interblock coding, in that interblocks are blocks that are obtained from a difference between a current video frame and a reference

video frame, and that interframe difference is motion estimated and compensated. Interframe encoding is extremely well known for encoding motion from differences between a reference image and the current image data, and this difference indicates the "motion" between two adjacent or successive moving images. Thus, clearly Bist teaches the concept of "motion" and estimation of motion elements.

Regarding lines 10-12 on page 12 of applicant's remarks, applicant states that there is no processing of a motion vector by inverse quantization. The examiner respectfully disagrees. In figure 10, Yu teaches that element 64 is an inverse quantizer used for inversely quantizing the quantized motion coefficients. Thus, Yu discloses the inverse quantization.

Regarding lines 16-20 on page 12 of applicant's remarks, applicant states that there is no processing of a motion vector by inverse quantization. The examiner respectfully disagrees. In figure 10, Yu teaches that element 64 is an inverse quantizer used for inversely quantizing the quantized motion coefficients. Thus, Yu discloses the inverse quantization.

Regarding lines 22-24 on page 12 of applicant's remarks, applicant contends that Yu and Bist are not providing the same processing of motion vectors. The examiner respectfully disagrees. Both Yu and Bist pertain to the same MPEG video encoding/decoding environment. Yu and Bist pertain to quantization of video data. And because both teachings are analogous to one another, the teachings of Yu and Bist are reasonably combinable. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to modify the Yu's teachings into Bist to formulate a set of inverse quantizers since a teaching for utilizing a set of quantizers exist so as to accurately, efficiently, precise decode image data in a clear, robust manner, as disclosed in Bist's column 4, lines 42-50.

Thus, the broad limitations of claim 15 are met. Dependent claims 16-20 are rejected for at least similar reasons as claim 15.

Claims 3-4 are rejected for reasons as stated in the rejected as below under Bist in view of Yu. Bist does not specifically disclose the use of a set of inverse quantizers, inverse quantization. However, Yu's figure 10 teaches the use of inverse quantization element 64. The use of inverse quantization is an obvious modification for one of ordinary skilled to perform the opposite of quantization so as to appropriately decode image data. Also, since Bist teaches the use of a set of quantizers, as disclosed in column 6, lines 17-20 where Bist discloses there is a set of quantizers R_0-R_n. Therefore, it would have been obvious to one of ordinary skill in the art to Bist and Yu to form a set of inverse quantizers since a teaching for utilizing a set of quantizers exist so as to accurately, efficiently, robustly decode image data, to minimize hardware requirements, and to save costs, as suggested in Yu's column 2, lines 38-46.

Regarding pages 13-14 of applicant's remarks, applicant states that new claims 33-39 are added to the set of claims submitted in the amendment filed 12/11/06. The examiner has rejected claims 33-39 in the rejection below. Peruse the rejection below for explanation.

Thus, the rejection of the claims is maintained.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1 and 15 are rejected on the ground of nonstatutory double patenting over claims 1 and 16 of U. S. Patent No. 6,738,423 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming

common subject matter, as follows: Claim 1 of the present application and claim 1 of U. S. Patent No. 6,738,423 are virtually similar to one another in that both are encoding methods with limitations of "estimating the motion picture…", "modeling the motion of picture elements…", "defining a set of quantizers…", "selecting… motion coefficient quantizer…", and "quantizing the motion coefficients…" Further, claim 15 of the present application and claim 16 of U. S. Patent No. 6,738,423 are virtually similar to one another in that both are decoding methods for performing the "receiving quantized motion coefficients…", "defining a set of inverse quantizers…", "performing inverse quantization…", etc.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2 and 5-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bist (6,249,546).

Regarding claim 1, Bist discloses a method for encoding video information, comprising the following steps of:

estimating the motion of picture elements between a piece of reference video information and a piece of current video information (col.2, ln.17-21; note interblock coding is discussed, where the block of a current video frame and a reference video frame is motion estimated and compensated);

modeling the motion of picture elements using a certain set of basis functions and certain motion coefficients (col.7, ln.45, col.8, ln.37 and col.11, ln.10 disclose a set of basis functions and DCT coefficients or motion coefficients);

defining a certain set of quantizers (col.6, ln.17-20; Bist discloses there is a set of quantizers R_0-R_n);

selecting, based on a certain predetermined selection of criterion, a motion coefficient quantizer from the set of quantizers (col.5, ln.63 to col.6, ln.16; Bist discloses the selection of a quantizer from a set of quantizers R_0-R_n); and

quantizing the motion coefficients using the selected motion coefficient quantizer (col.5, ln.63 to col.6, ln.16; note data is then quantized after selection of quantizer from a set of quantizers R_0-R_n).

Regarding claim 2, Bist discloses the selection criterion is the value of a certain encoding parameter (col.6, ln.19-20).

Regarding claims 5-6, Bist discloses the use of target bit quality and amount of information used (col.8, ln.3-47).

Regarding claims 7-10, Bist discloses using orthogonal basis functions (col.2, ln.17-21; note Bist discloses DCT).

Regarding claims 11-12, Bist discloses the motion coefficient quantizer is specified and received (col.5, ln.63 to col.6, ln.16; Bist discloses the selection of a quantizer from a set of quantizers R_0-R_n, wherein col.6, ln.17-20, Bist discloses there is a set of quantizers R_0-R_n to select from and after selection is made, the choice of quantizer is sent and received).

Regarding claims 13-14, Bist discloses set of quantizers with quantization intervals (col.6, ln.17 to col.7, ln.8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bist (6,249,546) in view of Yu (6,256,347).

Bist discloses determining a selected motion coefficient quantizer (col.5, ln.63 to col.6, ln.16; Bist discloses the selection of a quantizer from a set of quantizers R_0-R_n), determining motion of the picture elements (col.2, ln.17-21; note interblock coding is discussed, where the block of a current video frame and a reference video frame is motion estimated and compensated), determining a piece of prediction video information (col.2, ln.17-21; note interblock coding is discussed, where the block of a

current video frame and a reference video frame is motion estimated and compensated, and a motion vector is determined to represent a piece of prediction video information), determining a piece of prediction error video information (col.2, ln.17-21; note interblock coding is discussed, where the block of a current video frame and a reference video frame is motion estimated and compensated, and a motion vector is determined to represent a piece of prediction error video information), coding the piece of prediction error video information (col.2, ln.21, note VLC is used to code video information), quantizing the prediction error coefficients (col.5, ln.63 to col.6, ln.16; note data is then quantized after selection of quantizer from a set of quantizers R_0-R_n) and selecting the motion coefficient quantizer (col.5, ln.63 to col.6, ln.16; Bist discloses the selection of a quantizer from a set of quantizers R_0-R_n).

Bist does not specifically disclose the use of a set of inverse quantizers, inverse quantization. However, Yu teaches the use of inverse quantization (fig.10, element 64). The use of inverse quantization is an obvious modification for one of ordinary skilled to perform the opposite of quantization so as to appropriately decode image data. Also, since Bist teaches the use of a set of quantizers (col.6, ln.17-20; Bist discloses there is a set of quantizers R_0-R_n). Therefore, it would have been obvious to one of ordinary skill in the art to Bist and Yu to form a set of inverse quantizers since a teaching for utilizing a set of quantizers exist so as to accurately, efficiently, robustly decode image data, to minimize hardware requirements, and to save costs (Yu col.2, ln.38-46).

6. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (6,256,347) in view of Bist (6,249,546).

Regarding claim 15, Yu discloses a method for decoding encoded video information, comprising the following steps of:

receiving quantized motion coefficients describing motion of picture elements (fig.1, element 26);

performing inverse quantization of the quantized motion coefficients using an inverse quantizer (fig.10, element 64);

determining the motion of the picture elements using the inverse quantized motion coefficients and certain basis functions (fig.10, note element 62 then sends motion vectors and motion of picture elements to the adder 68, where the motion compensated motion vector data is and the inversely quantized, with quantization step size control, and inversely discrete cosine transformed motion data is added at element 68); and

determining a piece of prediction video information using a piece of reference video information and the determined motion of the picture elements (fig.10, note element 62 then sends motion vectors and motion of picture elements to the adder 68, where the motion compensated motion vector data is and the inversely quantized, with quantization step size control, and inversely discrete cosine transformed motion data is added at element 68).

Yu does not specifically disclose the determining of a selected motion coefficient quantizer using which the motion coefficients are quantized and defining a set of inverse quantizers. However, Bist teaches determining of a selected motion coefficient quantizer using which the motion coefficients are quantized (col.5, ln.63 to col.6, ln.16;

Bist discloses the selection of a quantizer from a set of quantizers R_0-R_n). Bist also teaches the defining of a set of quantizers (col.6, ln.17-20; Bist discloses there is a set of quantizers R_0-R_n). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Yu's teachings into Bist to formulate a set of inverse quantizers since a teaching for utilizing a set of quantizers exist so as to accurately, efficiently, precise decode image data in a clear, robust manner (Bist col.4, ln.42-50).

Note claims 16-20 have similar corresponding elements.

Claims 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (6,256,347) in view of Yagasaki (5,428,396).

Regarding claims 33-34, Yu method for decoding encoded video information (fig.10), the encoded video information comprising quantized motion coefficients and quantized prediction error coemcients, said quantized motion coefficients representing the motion of a picture element with respect to a piece of reference video information and having a certain accuracy, said quantized prediction error coefficients representing a piece of prediction error video information (figs.1-2), the method comprising:

determining a prediction error quantizer from the encoded video information, the prediction error quantizer using which the prediction error coefficients are quantized (fig.1, element 26);

performing inverse quantization of the quantized motion coefficients (fig.10, element 64);

forming prediction video information for the picture element from the piece of reference video information, using the inverse quantized motion coefficients (fig.10, note

element 62 then sends motion vectors and motion of picture elements to the adder 68, where the motion compensated motion vector data is and the inversely quantized, with quantization step size control, and inversely discrete cosine transformed motion data is added at element 68); and

performing inverse quantization of the quantized prediction error coefficients using an inverse quantizer corresponding to said prediction error quantizer (fig.10, element 64).

Yu does not specifically disclose determining the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer. However, Yagasaki teaches the determination of the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer (col.13, ln.24-36, Yagasaki discloses the ranging accuracy values of the motion coefficients obtained from the motion vectors). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yu and Yagasaki, as a whole, for accurately, efficiently encoding and decoding image data while maintaining high image quality and minimizing hardware requirements (Yagasaki col.3, ln.54-61).

Regarding claims 35-36, Yu discloses a decoder for decoding encoded video information, the decoder comprises:

an input unit for receiving encoded video information from a video encoder (fig.1, element 12), the encoded video information comprising quantized motion coefficients and quantized prediction error coefficients, said quantized motion coefficients

representing the motion of a picture element with respect to a piece of reference video information and having a certain accuracy, said quantized prediction error coefficients representing a piece of prediction error video information (fig.1, element 20), the input unit is configured to:

determine a prediction error quantizer from the encoded video information, the prediction error quantizer using which the prediction error coefficients are quantized (fig.1, element 26); and

a motion compensated predictor (fig.10, element 70) coupled to the input unit is configured to:

perform inverse quantization of the quantized motion coefficients (fig.10, element 64);

form prediction video information for the picture element from the piece of reference video information, using the inverse quantized motion coefficients (fig.10, note element 62 then sends motion vectors and motion of picture elements to the adder 68, where the motion compensated motion vector data is and the inversely quantized, with quantization step size control, and inversely discrete cosine transformed motion data is added at element 68); and

perform inverse quantization of the quantized prediction error coefficients using an inverse quantizer corresponding to said prediction error quantizer (fig.10, element 64).

Yu does not specifically disclose determining the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction

error quantizer. However, Yagasaki teaches the determination of the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer (col.13, ln.24-36, Yagasaki discloses the ranging accuracy values of the motion coefficients obtained from the motion vectors). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yu and Yagasaki, as a whole, for accurately, efficiently encoding and decoding image data while maintaining high image quality and minimizing hardware requirements (Yagasaki col.3, ln.54-61).

Regarding claims 37-38, Yu discloses a computer software program stored on a computer-readable medium, the software program causing the computer to perform a method for decoding encoded video information, receiving the encoded video information comprising quantized motion coefficients and quantized prediction error coefficients, said quantized motion coefficients representing the motion of a picture element with respect to a piece of reference video information and having a certain accuracy, said quantized prediction error coefficients representing a piece of prediction error video information, the method comprising:

determining a prediction error quantizer from the encoded video information, the prediction error quantizer using which the prediction error coefficients are quantized (fig.1, element 26);

performing inverse quantization of the quantized motion coefficients (fig.10, element 64);

forming prediction video information for the picture element from the piece of reference video information, using the inverse quantized motion coefficients (fig.10, note element 62 then sends motion vectors and motion of picture elements to the adder 68, where the motion compensated motion vector data is and the inversely quantized, with quantization step size control, and inversely discrete cosine transformed motion data is added at element 68); and

performing inverse quantization of the quantized prediction error coefficients using an inverse quantizer corresponding to said prediction error quantizer (fig.10, element 64).

Yu does not specifically disclose determining the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer. However, Yagasaki teaches the determination of the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer (col.13, ln.24-36, Yagasaki discloses the ranging accuracy values of the motion coefficients obtained from the motion vectors). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yu and Yagasaki, as a whole, for accurately, efficiently encoding and decoding image data while maintaining high image quality and minimizing hardware requirements (Yagasaki col.3, ln.54-61).

Regarding claim 39, Yu discloses a receiver comprising a decoder for decoding encoded video information, wherein the decoder comprises:

an input unit for receiving encoded video information from a video encoder, the encoded video information comprising quantized motion coefficients and quantized prediction error coefficients, said quantized motion coefficients representing the motion of a picture element with respect to a piece of reference video information and having a certain accuracy, said quantized prediction error coefficients representing a piece of prediction error video information (fig.10, element 60), the input unit is configured to:

determine a prediction error quantizer from the encoded video information, the prediction error quantizer using which the prediction error coefficients are quantized (fig.1, element 26); and

a motion compensated predictor (fig.10, element 70) coupled to the input unit is configured to:

perform inverse quantization of the quantized motion coefficients (fig.10, element 64);

form prediction video information for the picture element from the piece of reference video information, using the inverse quantized motion coefficients (fig.10, note element 62 then sends motion vectors and motion of picture elements to the adder 68, where the motion compensated motion vector data is and the inversely quantized, with quantization step size control, and inversely discrete cosine transformed motion data is added at element 68); and

perform inverse quantization of the quantized prediction error coefficients using an inverse quantizer corresponding to said prediction error quantizer (fig.10, element 64).

Yu does not specifically disclose determining the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer. However, Yagasaki teaches the determination of the accuracy of the motion coefficients using which the motion coefficients are quantized based on the prediction error quantizer (col.13, ln.24-36, Yagasaki discloses the ranging accuracy values of the motion coefficients obtained from the motion vectors). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yu and Yagasaki, as a whole, for accurately, efficiently encoding and decoding image data while maintaining high image quality and minimizing hardware requirements (Yagasaki col.3, ln.54-61).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Groody can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Allen Wong
Primary Examiner
Art Unit 2621

AW
3/12/07